

# TRANSFER SWITCHES

# SERIES TS

## GENERAL INFORMATION:

Series TS transfer switches allow power entering two input ports, A and B, to exit from output ports C and D respectively, or by appropriate switching, to exit from ports D and C respectively. A functional schematic of a transfer switch is shown in Fig. 1, and a typical circuit is shown in Fig. 2. The transfer switches are available with diodes that can be turned off and on at 1000 nanosecond switching speed. Units with higher speed diodes (to 10 nanoseconds) or with higher power capability (to 10 kW) can be quoted on request.

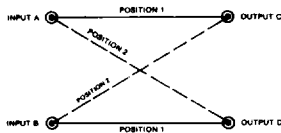


FIG. 1

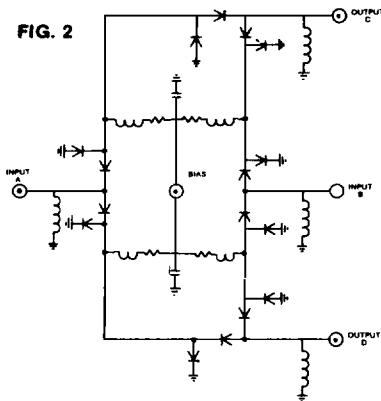


FIG. 2

## GENERAL SPECIFICATIONS:

- Frequency Coverage:** 0.025 to 18.0 GHz.  
**RF Impedance:** 50 OHMS.  
**DC Requirements:** All units without drivers require +2 volts at 150 mA for one direction (A-D and B-C) and -2 volts at 150 mA for the other direction (A-C and B-D).  
 For all units with driver  
 Logic "0" = Ins. Loss A→C, B→D  
 Isol. A→D, B→C  
 Logic "1" = Ins. Loss A→D, B→C  
 Isol. A→C, B→D
- Temperature Information:** Operating temperature from -55°C to +85°C.
- Switching Speed:** 10% to 90% or 90% to 10% of RF. There is an additional 20 nanosec of driver delay.
- Environment:** MIL-E-5400
- Connectors:** SMA standard, others on request.

## NOTES:

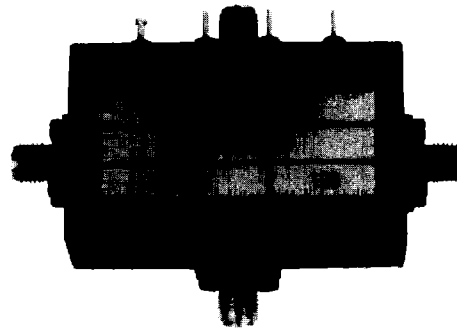
1. If drivers are required, the switch is ordered with a prefix D, e.g.: D DTS-29. The package thickness increases to 0.75 inches. ±5 volts at ±80 mA and a TTL logic input are provided (see mechanical outline). Switching speeds of 1 microsec. to 10 nanosec. can be provided. Switching speed required should be stated when ordering.

## TYPICAL MODEL NO.

TS  
or  
DTS  
|  
Model  
Series

XX  
|  
Freq  
Code

Hermetic Seal  
and Mil STD 883  
Screening Available

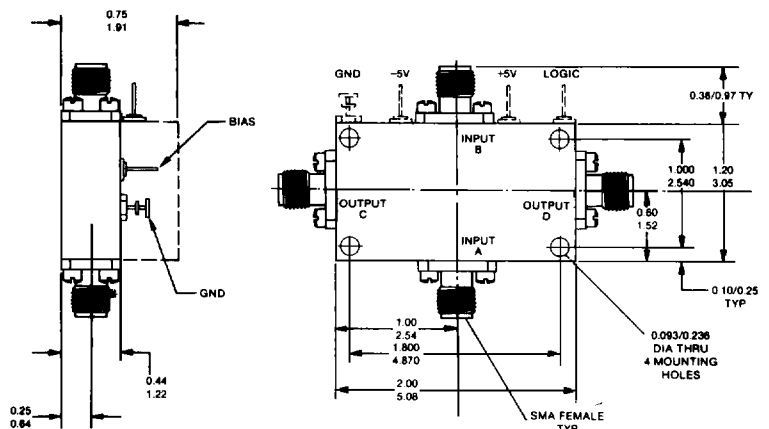


## ELECTRICAL PERFORMANCE

Model No.	Frequency Range GHz	Ins Loss dB Max	VSWR Max	Isolation dB Min	Max. Power Handling Ability Watts Pk	Watts Avg
TS-12	.025 - .25	0.75	1.6	60	5	1.0
TS-14	.050 - 2.0	1.75	1.6	60	5	1.0
TS-18	.10 - .50	1.0	1.5	60	5	1.0
TS-23	.10 - 2.0	1.75	1.6	60	5	1.0
TS-24	.4 - 1.5	1.0	1.5	60	5	1.0
TS-27	.5 - 1.0	0.8	1.5	60	2	0.5
TS-29	.5 - 2.0	1.0	1.5	60	5	1.0
TS-33	1.0 - 2.0	1.0	1.5	60	2	0.5
TS-38	1.0 - 4.0	1.5	1.5	50	5	1.0
TS-42	1.0 - 5.0	1.6	1.6	40	2	0.5
TS-45	1.7 - 2.4	1.2	1.5	50	5	1.0
TS-48	2.0 - 4.0	1.5	1.5	50	2	0.5
TS-52	2.0 - 8.0	1.8	1.7	35	5	1.0
TS-54	2.9 - 3.1	1.5	1.5	50	2	0.5
TS-58	4.0 - 8.0	1.8	1.6	40	5	1.0
TS-63	4.0 - 12.0	2.4	1.8	35	2	0.5
TS-67	2.0 - 18.0	3.5	2.2	30	2	0.5
TS-72	8.0 - 12.0	2.5	1.7	40	2	0.5
TS-75	6.0 - 18.0	3.2	2.0	30	2	0.5
TS-83	12.0 - 18.0	3.2	2.0	30	2	0.5

## Inches/Centimeters

xx ± 0.3 xxx ± .010/ xx ± .08 xxx ± .025



**KDI/triangle  
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